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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,415	02/03/2005	Goro Katsuyama	264930US3PCT	6303

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ALEXANDRIA, VA 22314

EXAMINER

VO, ANH T N

ART UNIT	PAPER NUMBER
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2861

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/523,415

Applicant(s)

KATSUYAMA ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/15/05 & 2/03/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement is made of the receipt of Preliminary Amendment filed 03 February 2005.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. The applicant should provide an English translation of the document (Japan 2002-273520, 09/19/2002) in order to grant Foreign Priority as claimed.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 27-32, 34-35, 37-43 and 51 are rejected under 35 USC 102 (b) as being anticipated by Thoman et al. (US Pat. 5,519,422).

Thoman et al. disclose in Figures 1-6 and 8A-8B printer cartridges (17, 18, 22, 26) for an ink jet printer comprising:

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27. a holding portion (an marked portion that includes a projection with solid lines and is opposite with an element 16 at a front face of the ink cartridge 17) formed over two faces of the ink cartridge (17) adjacent to each other (Figure 1A);
28. wherein the holding portion has a structure held from a vertical direction (Figure 1A);
29. wherein the two faces of the ink cartridge (17) adjacent to each other are an upper face and a front face of the ink cartridge (Figure 1A);
30. wherein one end of the holding portion is a projection portion (an unmarked projection that is located at a corner of the ink cartridge 17 and has solid lines) provided on an upper face of the ink cartridge (17) (Figure 1A);
31. wherein the projection portion is provided at a front end portion of the upper face of the ink cartridge (17) (Figure 1A);
32. wherein one end of the holding portion is a corner portion of a recess portion (an unmarked recess that is close by the element 16) provided on a front face of the ink cartridge (17) (Figure 1A);
34. wherein the corner portion of the recess portion is positioned in a midway, in a vertical direction, of the front face of the ink cartridge (17) (Figure 1A);
35. wherein the recess portion is formed over an entire width of the ink cartridge (17) and is opened at both end portions (Figure 1A);
37. wherein the holding portion has a flat portion that allows pressing in a cartridge (17) mounting direction (Figures 1A and 8B);
38. wherein a holding style of the holding portion can be changed according to a height at a time of cartridge mounting (Figures 8A-8B);
39. a guide member (14) that guides the ink cartridge (17) during cartridge mounting (Figures 1A and 6);
40. wherein the guide member (14) allows positioning of the ink cartridge (17) in the ink jet printer (Figures 1A-3C and 6);
41. wherein the guide member (14) allows positioning of the ink cartridge in the ink jet printer in a vertical direction (Figures 1A-3C and 6);
42. wherein the guide member (14) allows positioning of the ink cartridge in the ink jet printer in a front direction and a rear direction (Figures 1A-1B);

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- 43. wherein the guide member (14 or 20 or 24 or 28) is provided at a different position corresponding to a color of ink in the ink cartridge (17 or 18 or 22 or 26);
- 48. wherein the recess portion is positioned in a midway, in a vertical direction, of the front face of the ink cartridge (Figure 1A-1B);
- 49. wherein the recess portion is formed over an entire width of the ink cartridge and is opened at both end portions (Figures 1A-1B); and
- 51. an ink cartridge (17, 18, 22, 26) that is detachably attached to the ink jet printer (80) and includes a holding portion (an marked portion that includes a projection with solid lines and is opposite with an element 16 at a front face of the ink cartridge 17) formed over two faces of the ink cartridge adjacent to each other (Figures 1A-1B and 5).

Claims 27-31, 39-45, 49 and 51-52 are rejected under 35 USC 102 (b) as being anticipated by Childers et al. (US Pat. 5,956,057).

Childers et al. disclose in Figures 2-3 and 4b-4c an ink cartridge using in an ink supply system comprising:

- 27. a holding portion (an marked portion that includes projections forming on recesses at the top of the ink cartridge 12) formed over two faces of the ink cartridge (12) adjacent to each other (Figure 4b);
- 28. wherein the holding portion has a structure held from a vertical direction (Figure 3);
- 29. wherein the two faces of the ink cartridge (12) adjacent to each other are an upper face and a front face of the ink cartridge (Figure 3);
- 30. wherein one end of the holding portion is a projection portion (unmarked projections or ribs that are located at the top of the ink cartridge 12) provided on an upper face of the ink cartridge (12) (Figure 3);
- 31. wherein the projection portion is provided at a front end portion of the upper face of the ink cartridge (12) (Figure 3);
- 39. a guide member (34) that guides the ink cartridge (12) during cartridge mounting (Figure 3);
- 40. wherein the guide member (34) allows positioning of the ink cartridge (12) in the ink jet

printer (Figures 2-3);

41. wherein the guide member (34) allows positioning of the ink cartridge (12) in the ink jet printer in a vertical direction (Figure 3);

42. wherein the guide member (34) allows positioning of the ink cartridge (12) in the ink jet printer (10) in a front direction and a rear direction (Figures 2-3);

43. wherein the guide member (34) is provided at a different position corresponding to a color of ink in the ink cartridge (Figures 3 and 5);

44. an ink supplying tube (20) that is provided at a rear face portion of the ink cartridge (12) and encircled by a space that is opened at both sides, in a widthwise direction, of the ink cartridge (12) (Figures 3 and 4c);

45. a recess portion (unmarked recesses at the top of ink cartridge 12 that are close by elements 63) for a user to put a finger that is provided at a front face of the ink cartridge (12) (Figure 4b);

49. wherein the recess portion is formed over an entire width of the ink cartridge (12) and is opened at both end portions (Figure 4b);

51. an ink cartridge (12) that is detachably attached to the ink jet printer and includes a holding portion formed over two faces of the ink cartridge adjacent to each other (Figures 2-3 and 4b);

52. an ink cartridge (12) that is detachably attached to the ink jet printer (10) and includes a recess portion for a user to put a finger, the recess portion provided at a front face of the ink cartridge (Figures 2-3 and 4b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 33, 36, 45-50 and 52 are rejected under 35 USC 103 (a) as being unpatentable over Thoman et al. (US Pat. 5,519,422).

Thoman et al. disclose the basic features of the claimed invention were stated above but do not disclose "the corner portion of the recess portion is formed to have an acute angle; an angle formed by a lower end portion of the recess portion and the front face of the ink cartridge is an obtuse angle; and a recess portion for a user to put a finger that is provided at a front face of the ink cartridge; wherein the recess portion includes one corner portion on which the finger of the user is put. ". It would have been obvious to one having ordinary skill in the art at the time the invention was made to select changes in the surface of the ink cartridge with an acute angle or obtuse angle for the purpose of easily holding the ink cartridge by user, since it is a mechanical design expedient for an engineer depending upon a particular environment and the applications in which the ink jet cartridge is to be used.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references (US Pat. 5,880,764, US Pat. 5,530,531, US Pat. 6,290,346) cited in the PTO 892 form show an ink cartridge which is deemed to be relevant to the present invention. These references should be reviewed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M..

The fax number of this Group 2861 is (571) 273-8300.


ANH T.N. VO
PRIMARY EXAMINER
January 4, 2007